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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,119	06/22/2001	Takahiro Ito	Q62668	4996

7590 01/24/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,119

Applicant(s)

ITO ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 16 and 18 is/are allowed.
- 6) ☒ Claim(s) 8-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1) Claim 7 is objected to because of the following informalities: The grammar is incorrect / awkward. The following changes are suggested for claim 7: (1) on line 1 after "claim 1" insert --wherein-- and (2) on line 6 delete --so-- (line 9 also recites "so"). Appropriate correction is required.

2) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3) Claims 8-15 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 8 and 17, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is (1) the subject matter at lines 6-11 of claim 8 and (2) the subject matter at lines 9-14 and 22-27 of claim 17. Applicant identifies figures 10-13B as supporting this added subject matter. However, every block in the two tread regions in the tread patterns of figures 10 and 12 does not have a sub-groove arranged in parallel to a diagonal of the block at a position offset from the diagonal at the same block part side when dividing the block in two block parts. For example some of the blocks in figure 10 do not have sub-grooves. Some the blocks in figure 12 (those at the CL) do not have

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sub-grooves having a central main portion substantially parallel to a diagonal of the block at a position offset from the diagonal. More importantly, the central main portion of sub-grooves in a "left tread region" are offset on the *right* side of the block whereas the central main portion of sub-grooves on the "right tread region" are offset on the *left* side (instead of "at the *same* block part side") of the block. The same is true for figures 1 and 5.

4) Claims 8-15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 8 and 17, the relationship between the plurality of blocks and two tread regions is unclear. It is unclear for example if each of the two tread regions must have blocks having the quadrilateral form. In claim 8, it is suggested to clarify this claim as follows: (1) on line 2 after "a plurality of blocks" insert --in each of two tread regions-- and (2) on line 4 delete --and having a plurality of blocks--. It is suggested to amend the description of the rear and tire and front tire of claim 17 in a corresponding manner.

In claims 12 and 13, there is no antecedent basis for "the longitudinal main grooves" and as such the number of grooves required is unclear. Is the circumferential groove of claim 8 one of the longitudinal grooves in claims 12, 13?

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6) **Claims 8-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al '766 (US 5176766) in view of Matsuzaki et al (WO 01/08906) or Koyama et al (US 6003575).**

With respect to Matsuzaki et al, Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Landers et al '766 discloses a pneumatic tire having circumferential grooves intersecting lateral grooves to form lugs (blocks) wherein (a) each lug has substantially a quadrilateral form and (b) each lug contains a **single slot (single sub-groove)** completely crossing the lug. Each slot (sub-groove) comprises end portions connecting an inclined central main portion to circumferential grooves. As can be seen from figure 4, the inclined central main portion is shown as being offset from a diagonal of the block. In particular, the central main portion of each of the shoulder blocks is substantially parallel to and offset from a diagonal of the blocks. The block also contains notches terminating in a blind slot (sub-groove). An aquachannel (wide circumferential groove) divides the tread into two tread regions.

As to claims 8-9 and 11-12, it would have been obvious to one of ordinary skill in the art to form Landers et al's tread such that the aquachannel (a wide circumferential groove) divides the tread into two tread regions in which the central main portion of the sub-groove formed in every block located at each of the two tread regions (there being only one sub-groove in each block) is arranged substantially parallel to a diagonal of the block at a position offset from the diagonal as claimed in view of (1) Landers et al's

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teaching to form a sub-groove in each block wherein as can be seen from figure 4 the central main portion of the sub-grooves in the shoulder blocks is offset from a diagonal of the block and (2) either the suggestion from either Matsuzaki et al or Koyama et al to divide a tread into two tread regions in which the central main portion of the sub-groove (sipe) formed in every block located at each of the two tread regions (there being only one sub-groove in each block) is arranged in the same manner. See figures 4, 5, 7, 9, 11, 12 of Matsuzaki et al or figure 1 of Koyama et al.

As to claims 9 and 12, the offset is in a direction away from the EP of the tire.

With respect to arc shaped connecting portions (claim 12), it would have been obvious to connect the central main portion to the end portions of the sub-groove of Landers et al as claimed in view of the suggestion from either Matsuzaki et al (e.g. figure 8) or Koyama et al (e.g. figure 13) to connect the central main portion to end portions with a curved arc as an alternative to an angled corner.

As to claim 11, Landers et al '766 discloses blocks in an inner row and blocks in an outer row. Claim 11 does not appear to require an offset toward the EP.

7) Claims 10-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al '766 in view of Matsuzaki et al or Koyama et al as applied above and further in view of Landers '169 (US 5824169).

As to claims 10-11 and 13-14, it would have been obvious to one of ordinary skill in art to arrange the sub-grooves in Landers et al '766 such that they extend along the shorter diagonal of the block with the central main portion being offset toward the EP since Landers et al '169, which discloses a tread pattern substantially similar to that of

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Landers '766, teaches arranging sub-grooves in blocks such that the central main portion extends along the shorter diagonal (instead of the longer diagonal) of the block and is offset toward the EP (see figure 3) in order to minimize the difference of principle direction of lug stiffness between individual lugs.

8) Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al '766 in view of in view of Matsuzaki et al or Koyama et al as applied above and further in view of Europe '104 (EP 810104) and/or Lurois (US 5896905).

As to claim 15, it would have been obvious to one of ordinary skill in the art to incline the sipes of Landers et al '766 as set forth in claim 15 in view of (1) Europe '104's suggestion to incline sub-grooves (sipes) with respect to the radial direction so that the tire has good braking properties on wet ground and good traction properties on snow and ice and /or (2) Lurois's suggestion to incline sub-grooves (sipes) with respect to the radial direction differently for front tires and rear tires to improve wear.

9) Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers et al '766 in view of in view of Matsuzaki et al or Koyama et al as applied above and further in view of Europe '890 (EP 573890).

As to claim 17, it would have been obvious to mount front and rear tires of Landers et al '766 on a vehicle as claimed since (a) Landers et al '766 teaches mounting the tire either forward (for improved wet traction) or backward (for superior traction in snow) and (b) Europe '890 suggests mounting directional tires on a vehicle

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such that the directional tread pattern for the front tires are mounted opposite of that for the rear tires.

Allowable Subject Matter

10) **Claims 1-6, 16 and 18 are allowed.**

Claim 7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Remarks

11) Applicant's arguments with respect to claims 8-15 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 10-13-04 have been fully considered but they are not persuasive. With respect to applicant's arguments regarding every block in the two tread regions, note the application of newly cited Matsuzaki et al / Koyama et al.

12) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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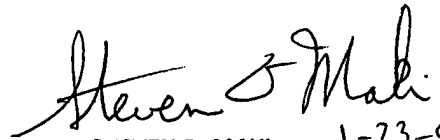
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
January 23, 2005


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AV 1733
1-23-05